

## ABSTRACT

The present invention is to provide a method of enhancement of electrical conductivity for conductive polymer by use of field effect control, wherein on the substrate, whose surface was treated with a field, was coated by a containing monomer or oligomer solution of conductive polymer, through a field mechanism a monomer or oligomer of conductive polymer can demonstrate the sequential order molecular structure layer on the substrate, on this molecular structure layer was coated by an available amount of oxidant to proceed the polymerization, it was subjected to a field during polymerization to form 3-dimensional order stacking structure in order to increase the functional characteristic and electrical conductivity for conductive polymer.